

TWO SPECIES OF SPHINGIDAE (LEPIDOPTERA) NEW TO FIJI

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TWO ADDITIONAL SPECIES of Sphingidae (*Hippotion scropha* (Linnaeus) and *Theretra nessus* (Drury)) have been recorded from Fiji. The level of previous recording in Fiji makes it difficult to assert positively that these have recently arrived in the country, but the frequency and/or ease with which they were taken suggests that this is probably the case.

Previous systematic recording of Lepidoptera in Fiji has been limited. In the last 20 years, the only substantial published work has been that of Robinson (1975). In this, he records ten species of Sphingidae. Earlier, Phillips (1930), published a list of species of Lepidoptera occurring in Fiji. The Fijian word *ruru* is used to refer generically to all night-flying species of Sphingidae, and no information concerning the occurrence of individual species has been available from local knowledge. However, it is difficult to believe that neither Phillips nor Robinson would have recorded these species if they had occurred in their present numbers.

Since early 1991, light-trapping has been carried out in areas easily accessible from Suva. In addition, a small amount of collecting has taken place occasionally in other parts of Fiji and the South Pacific when these were visited. The observations described in the following paragraphs refer to this programme.

Hippotion scropha (Linnaeus). Five specimens of this species were taken at house lights on a single evening at a house at Uciwai Beach, about 15km south of Nadi, grid reference L28/4604 on the night of 23.vii.1994. The area is one of sugar cane fields adjacent to a sandy beach. The surrounding area is cultivated, mostly with sugar cane.

Theretra nessus (Drury). Specimens of this species were taken as follows:

Suburban garden locations in Suva. Six specimens were taken on two occasions during 1991 (31.iii.1991 and 17.xii.1991) at GR O29/7076 and one (24.iv.1995) at GR O29/6772.

Reef Resort, Korotogo, a resort hotel, on the southern coast of Viti Levu (GR L29/7369). A single specimen was taken at a room light on the night of 25.xii.1991. The resort is situated in an area of mixed agriculture, with some sugar cane.

Nukurua Forest Reserve, Tailevu (GR O28/7397). This is an area of extensively modified lowland rain forest. A total of ten specimens were taken (12.ii.1993, 4.xi.1993, 1.iii.1994 and 6.xi.1994).

Galoa Forest Plantation, Serua (GR M29/1867). This is an area of extensively modified rainforest, situated at an altitude of around 500m. Two specimens were taken on each of two occasions (21.iv.1993 and 20.i.94).

Namosi Highlands (N29/3978). Relatively undisturbed rainforest at an altitude of around 600m. Six specimens were taken (28.iv.1995).

In a recent published work (Common, 1990), the following observations are made about the distribution of these species in the South Pacific:

Hippotion scropha is a common species throughout mainland Australia and Tasmania, and also occurs in New Caledonia, the New Hebrides and occasionally on Norfolk Island.

Theretra nesus . . . ranges from India through south-east Asia to New Guinea, eastern Queensland, north-eastern New South Wales, the New Hebrides, the Loyalty Islands and New Caledonia.

The following additional information has been obtained about the distribution of these species in the Pacific. The collection of the Bishop Museum in Honolulu, Hawaii (Miller, *pers. comm.*) contains specimens as follows: *Hippotion scrofa*, New Caledonia and *Theretra nesus*, New Caledonia and New Hebrides (now Vanuatu). *Theretra nesus* appeared in Hawaii for the first time in 1974 (Reimer, *pers. comm.*) and spread rapidly through the group, although it is interesting to note that the species still appeared to be absent from Fiji in 1975 (Robinson, *pers. comm.*). Robinson also recorded *Hippotion scrofa* from Vanuatu in 1971.

When so many species are suffering from reductions in ranges, it is encouraging to find these two species extending their distribution.

References

- Common, I.F.B., 1990. *Moths of Australia*. pp. 414-415.
Phillips, R.H., 1930. *Private list in the Fiji Department of Agriculture Library*.
Robinson, G.S., 1975. *Macrolepidoptera of Fiji and Rotuma*.
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Up in the clouds

In my article some years ago on Butterflies in Lanzerote (*Entomologist's Rec. J. Var.* **103**: 79-81) I remarked on the reaction of a fellow holidaymaker to the statement that a certain species "usually flew at 1500 feet". It became apparent that he took this to mean there was a sort of layer 1500 feet up in which the butterflies generally flew.

Now, I find that I have, myself, once been caught in a similar misunderstanding!

When we were little my father kept what he called a Children's Diary – a little notebook in which he jotted down our sayings and doings. An entry for August 1932 (I would have been seven and we were on holiday at Austwick) reads: "Mr Cheetham, the entomologist, told Geoff that some flies come in clouds. Geoff, in all innocence, enquired 'how he got up there to get them!'" – G.G. BALDWIN, 22 Edgerton Grove Road, Huddersfield, West Yorkshire HD1 5QX.